REMARKS

Claims 1-16 were pending at the time of examination. Claims 1, 9, 10, and 15 have been amended. No new matter has been added. The Applicants respectfully request reconsideration based on the foregoing amendments and the following remarks.

Claims 9-14 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,704,768 (Zombek). Claims 1-8 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Zombek in view of U.S. Patent Publication No. 2001/0005358 (Shiozawa). The Applicants respectfully traverse the rejections for at least the following reasons.

Zombek describes "a middleware service...that can allow for the development of client and server applications independent of the underlying network protocols and device configurations." Column 9, lines 46-49. Beginning at column 9, line 58, Zombek describes an implementation with reference to FIG. 1A in which protocol gateways 116 enable communication between client devices 112 (e.g., dial-up modems, analog and digital cell phones, messaging clients, pagers, etc.) on a network 114 and back-end servers (BESs) 122 on networks 118. Client devices 112 and network 114 may operate according to any of a wide variety of wireless access network protocols. BESs 122 and network 118 operate according to the well known TCP/IP protocols. Each PG 116 is responsible for translating between the TCP/IP protocol and the one of the many supported wireless protocols. Message routers (MRs) 124 route messages between PGs 116 and BESs 122. See column 10, lines 11-30. See also column 18, line 28, to column 19, line 61, which describes the operation of PGs 116.

Beginning at column 19, line 62, Zombek describes the role played by MRs 124 in his system. As described, MRs 124 perform routing services among the various network components, e.g., PGs 116 and BESs 122. Column 19, line 63, to column 20, line 16. Each MR 124 refers to its associated MR database (MRDB) 128 to determine to which BES 122 to transmit a message. This determination may be based on the service type and message type indicated in the message. MRs 124 can also perform load balancing among PGs 116 for messages sent from BESs 122 back to client devices 112. Column 20, lines 27-62.

The Examiner referred to MRs 124 as acting "as a proxy between the BES network and the client network." The Applicants respectfully disagree. The term "proxy," as used in the present application and as understood by those of skill in the computing arts, refers to a device or service which acts on behalf of another device or service in communicating with a third device or service. This interaction facilitates and indirect connection between and often involves hiding the identity of the device or services on whose behalf the proxy is acting. See, for example,

paragraph [1175] of the present application. See also Zombek at column 31, lines 36-56, which describes operation of HTTP proxy back-end server 132.

Zombek's MRs 124 clearly do not act on behalf of any devices or services in communications with either PGs 116 and BESs 122. Rather, MRs 124 play the role of conventional routers in that they forward messages to the various network devices. There is some level of intelligence involved in that MRs 124 make routing decisions based on a variety of information, but at no point do they act as a proxy as that term is conventionally understood in the computing arts. As described in column 31, proxy services are provided in the network, but by conventional proxy servers 132, not MRs 124.

Notwithstanding the foregoing, claims 1, 9, and 10 have been amended to more explicitly recite that the proxies to which these claims refer are operating as proxies "at the application level." These amendments merely make clear what one of ordinary skill in the art would understand from the currently pending claims, and what is already at least implicit in claim 1 which refers to the processing of "an application-level message." It is therefore asserted by the Applicants that these amendments should be entered in that they do not raise new issues requiring further search. In addition, because the claims are believed to be allowable without these amendments, they are not being presented for any reason related to patentability.

By contrast, Zombek's MRs 124 do not interact with end-point services at the application level. That is, as described above, and as described in Zombek beginning at column 19, line 62, MRs 124 route messages among the various network components according to the TCP/IP protocol. In conjunction with PGs 116, this enables "the development of client and server applications independent of the underlying network protocols and device configurations." Column 9, lines 48-50. In other words, the clients and servers are enabled to directly interact with each other at the application level with the translation between different transport and network layer protocols being transparent to the end points. Column 10, lines 4-7. The entire point of Zombek is that processes, i.e., services, operating at the application level do not need to be concerned with the fact that the devices and networks in which they are operating may have incompatible underlying protocols.

By contrast, as recited in amended claim 1, the "mapped service...acts as a proxy for said first service with said second service *at the application level*." The transport and network level interactions between Zombek's MRs 124 are easily distinguished on this basis. In fact, Zombek makes it quite clear that the end point applications (i.e., the client and server applications) which communicate via MRs 124 and PGs 116 are enabled to communicate directly with each other such that the underlying network and transport level protocols are transparent. This would not be

the case if MRs 124 were interacting with the end point applications on the application level. Several references are made throughout Zombek's specification to the direct manner in which client and server applications communicate with each other. See, for example, column 9, lines 50-55, column 10, lines 4-7, column 10, lines 22-27, etc. At no point does Zombek teach that MRs 124 play the role of a proxy as claimed. In fact, introducing such a functionality into MRs 124 would run counter to the intended functionality of Zombek's system, i.e., the transparency with which client and server applications communicate.

Significantly, at column 25, lines 28-31, Zombek states that "[i]n the intelligent messaging network architecture, only the BESs 122 can have knowledge of the application content required to communicate with a client application." Thus, Zombek does not teach or suggest a mapped service or proxy service as recited in the claims of the present application. In view of the foregoing, the rejection of claim 1 should be withdrawn.

Claim 9 is a computer program product claim having limitations similar to those recited in claim 1. Claims 2-8 all depend from claim 1. Therefore, these claims are neither anticipated nor obvious for at least the reasons discussed above with respect to claim 1, and the rejections of claims 2-9 should be withdrawn. Similarly, claims 11-14 all depend from claim 10, and are therefore neither anticipated nor obvious for at least the reasons discussed above with respect to claim 10, and the rejections of claims 11-14 should be withdrawn.

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2004/0243574 (Giroux) in view of U.S. Patent No. 6,925,488 (Bantz). Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Giroux and Bantz in view of Zombek. The Applicants respectfully traverse the rejection for at least the following reasons.

Claim 15 is directed to a message routing method. A proxy service is provided by the message routing network for messages transferred between a first application service provider and a second application service provider in the message routing network. The first application service provider and the second application service provider provide application services for an enterprise. The proxy service enables the first application service provider to send information on behalf of the enterprise to the second application service provider without the first application service provider and the second application service provider having knowledge of each other at any point in time.

The Examiner alleges that the ASP server 160 of Giroux can be considered to be equivalent to the claimed "proxy service." The Applicants respectfully disagree. Generally, a proxy service or proxy server is defined as a service that allows clients to make indirect network

connections to other network services. A client connects to the proxy service, then requests a connection, file or other resource available on a different server. The proxy service provides the resource either by connecting to the specified server, or by serving the resource from a cache. This is not the role of ASP server 160 in Giroux. In contrast, the ASP server 160 in Giroux "supports the ASP of the invention" (paragraph [0050]) and stores the software necessary for transferring data from a first ASP to a second ASP (paragraph [0058]). Nothing in Giroux states that all user requests are required to go through ASP server 160. In fact, paragraph [0080] of Giroux states that ASP server 160 "...is the actual ASP web-site of the invention. This site is not normally accessed directly by the client, but rather is referred by a partner website. The ASP server 160 web-site of the invention will then portray the look and feel of the referring website." This is obviously contrary to the role of a proxy service as recited in claim 15 of the present application.

The Examiner acknowledges that Giroux does not teach sending information "without said first application provider and said second application service provider having knowledge of each other at any point in time." Instead, the Examiner relies on Bantz as teaching this limitation. Even assuming this to be true, it makes little sense to combine Giroux and Bantz, since the whole point of Giroux is to transfer data from one ASP to another, at the request of a user. Such a transfer would be difficult to accomplish without the user having knowledge of the destination of the data transfer.

Notwithstanding the foregoing, claim 15 has been amended to recite "providing an application-level proxy service." This amendment merely makes clear what one of ordinary skill in the art would understand from the currently pending claim, and what is already at least implicit in claim 15 which refers to messaging between "application service providers." It is therefore asserted by the Applicants that these amendments should be entered in that they do not raise new issues requiring further search. In addition, because the claims are believed to be allowable without these amendments, they are not being presented for any reason related to patentability.

In contrast with the application-level proxy service recited in amended claim 15, Bantz describes the routing of messages in a network based on message type. As with the Zombek system, Bantz describes a mechanism which operates at the transport and network layers and "redirects messages to a given destination, based on their categories." Column 6, lines 56, to column 7, line 25. Therefore, for at least these reasons, the rejection of claim 15 under 35 U.S.C. § 103(a) should be withdrawn.

Claim 16 depends from claim 15, and is therefore neither anticipated nor obvious for at least the reasons discussed above with respect to claim 15. Thus it is respectfully submitted that the rejection of claim 16 under 35 U.S.C. § 103(a) should also be withdrawn.

The Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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